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BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JONATHAN STANLEY HAROLD DENYER and ANTHONY DYCHE

Appeal 2011-007327
Application 09/781,610
Technology Center 3700

Before: STEVEN D. A. McCARTHY, WILLIAM V. SAINDON, and HYUN J. JUNG, *Administrative Patent Judges*.

Opinion for the Board filed by *Administrative Patent Judge* JUNG.

Opinion Dissenting filed by *Administrative Patent Judge* McCARTHY.

JUNG, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Jonathan Stanley Harold Denyer and Anthony Dyche (Appellants) appeal under 35 U.S.C. § 134 from a final rejection of claims 1, 3, 7, 8, 12, 13, 16-21, 39-41, 44, and 51-63. App. Br. 3. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM-IN-PART.

THE CLAIMED SUBJECT MATTER

The claimed subject matter "relates to the control of drug delivery apparatus." Spec. 1:4. Claims 1, 13, 19-21, 39, and 40 are independent. Claim 1, reproduced below, is illustrative of the claimed subject matter:

> 1. A drug package comprising:
> at least one container containing a drug for delivery to a patient in a drug delivery device; and
> an electronic data carrier removable from the at least one container, the carrier including a memory holding drug treatment information for use by the drug delivery device, the electronic data carrier further includes a radio frequency device for transmitting the drug treatment information to the drug delivery device.

THE REFERENCES

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Gordon	US 4,617,557	Oct. 14, 1986
Anderson	US 5,237,987	Aug. 24, 1993
Chartrand	US 5,562,550	Oct. 8, 1996

THE REJECTIONS

The Appellants seek our review of the following rejections:

Claims 1, 3, 7, 8, 12, 19-21, 54, 57-60, 62, and 63[1] stand rejected under 35 U.S.C. §102(b) as anticipated by Gordon. Ans. 3-5.

Claims 39-41, 44, and 61[2] stand rejected under 35 U.S.C. §103(a) as unpatentable over Gordon and Chartrand. *Id.* at 6.

Claims 1, 13, 16-19, and 51-56[3] stand rejected under 35 U.S.C. § 103(a) as unpatentable over Anderson and Gordon. *Id.* at 6-7.

ANALYSIS

Anticipation

The Examiner finds that Gordon discloses the subject matter of independent claims 1 and 19-21. Ans. 3-5. In particular, the Examiner finds that a radio transmitter 70 of Gordon discloses the radio frequency device of these claims. *Id.* at 4. The Examiner also provides Figures 3, 5, and 6 from Gordon to indicate the "drug containers" and "data carrier." *Id.* at 5.
The Appellants argue that Gordon fails to disclose "the electronic data carrier further includes a radio frequency device," as recited by claim 1. App. Br. 8. The Appellants contend that the radio frequency device 70 of

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[1] The Examiner erroneously lists claim 4 and omits claim 57 as rejected under 35 U.S.C. § 102(a). Ans. 3. Claim 4 has been canceled. App. Br. 3. A rejection of claim 57 is described in paragraph 3 on page 4 of the Answer.
[2] The Examiner mistakenly lists claim 48 as rejected under 35 U.S.C. § 103(a) as unpatentable over Gordon and Chartrand. Ans. 6. However, claim 48 has been canceled. App. Br. 3.
[3] The Examiner does not include claims 16-18, 51, and 52 in the listing of the claims rejected under 35 U.S.C. § 103(a) as unpatentable over Anderson and Gordon. Ans. 6. However, the Examiner makes findings that Anderson and Gordon teaches limitations of these claims. *Id.* at 7.

Gordon is not part of the alleged electronic data carrier 64 and is entirely separate from the alleged electronic data carrier 64. *Id.* at 8-9. The Appellants also argue that Gordon fails to teach "a radio frequency device for transmitting the drug treatment information to the drug delivery device," as recited by claim 1, because Gordon fails to disclose that drug treatment information is transmitted from the electronic data carrier to the asserted drug delivery device via the alleged radio frequency device 70. *Id.* at 9.

The Appellants' arguments are persuasive. Gordon depicts the radio transmitter 70 in its Figure 7. Gordon states that the circuitry in Figure 7 is contained in an integrated circuit chip 88 which resides in an adhesive portion shown in Figure 6. Gordon, col. 6, ll. 55-58. The Examiner finds that Figure 6 shows the "drug container" while Figure 5 shows the "data carrier" (housing 64). Ans. 5. Gordon states that Figures 5 and 6 show an embodiment which permits the housing 64 to be remote from the blister package shown in Figure 6. Gordon, col. 6, ll. 36-39. Thus, Gordon does not disclose an electronic data carrier further including a radio frequency device for transmitting the drug treatment information to the drug delivery device, as required by claim 1. Therefore, Gordon does not show every element and limitation of claim 1 arranged as required by the claim.

The Appellants similarly argue that Gordon fails to disclose "an output configured to transmit the drug-specific treatment information via a radio frequency signal from the memory to the drug delivery device," as recited by independent claim 19. App. Br. 11. Claim 19 recites that the electronic data carrier comprises the memory and the output configured to transmit from the memory to the drug delivery device. For the reasons

discussed above, Gordon does not teach that its housing 64 includes an output configured to transmit to the blister package shown in Figure 6.

The Appellants also argue that Gordon fails to disclose a "radio frequency input which is configured to receive the treatment information from the electronic data carrier over a radio frequency signal, whereby the drug delivery device is configured to deliver the drug in conformity with the treatment information," as recited by independent claim 20. App. Br. 13. As discussed above, the blister package of Gordon does not include an input which is configured to receive from housing 64 of Gordon.

For the same reasons, we are also persuaded by the Appellants' contention that Gordon fails to disclose "transmitting the treatment information from the electronic data carrier to the drug delivery device," as recited by independent claim 21. App. Br. 13-14.

Accordingly, we cannot sustain the rejection of independent claims 1 and 19-21 or their dependent claims 3, 7, 8, 12, 57-60, 62, and 63 under 35 U.S.C. § 102(b) as anticipated by Gordon.

Unpatentability – Claims 39-41, 44, and 61

The Examiner finds that Gordon teaches the subject matter of independent claims 39 and 40 but fails to teach that the data carrier is arranged to be powered inductively from a radio frequency signal. Ans. 6. The Examiner also finds that Chartrand teaches a device with a data carrier arranged to be powered inductively from a radio frequency signal and thus concludes that it would have been obvious to use a data carrier arranged to be powered inductively from a radio frequency signal as an alternative to battery power, because they are expedients of each other and because inductively powered data carriers are well known in the art. *Id.*

The Appellants argue that Chartrand's reasons for inductive powering are not present in Gordon and that the Examiner's proposed modification is not obvious because it would complicate Gordon and make Gordon less reliable without any countervailing benefit. App. Br. 15. The Appellants further argue that there is no reason to transfer the battery from the electronic data carrier 64 to the blister package and then transmit power back to the electronic data carrier 64 via inductive powering. *Id.* at 15. We are not persuaded as the Examiner makes factual findings and provides a rationale based on those findings for the proposed combination, which the Appellants' argument does not address. *See* Ans. 6. Also, our reviewing court has recognized that a given course of action often has simultaneous advantages and disadvantages, and this does not necessarily obviate any or all reasons to combine teachings. *See Winner Int'l Royalty Corp. v. Wang*, 202 F.3d 1340, 1349 n.8 (Fed. Cir. 2000) ("The fact that the motivating benefit comes at the expense of another benefit, however, should not nullify its use as a basis to modify the disclosure of one reference with the teachings of another.").

The Appellants further argue that Gordon teaches away from the Examiner's proposed modification because "it would defeat Gordon's goal of enabling the electronic data carrier 64 to be remote from the blister package" App. Br. 15. However, we are not persuaded because we do not find, nor do the Appellants cite, any portion of Gordon which criticizes, discredits, discourages, or leads in a direction divergent from inductive powering. *See also Winner Int'l Royalty*, 202 F.3d at 1349 n.8.

The Appellants also cite sections of the Manual of Patent Examining Procedure regarding a proposed modification being unsatisfactory for its

intended purpose or changing the principle of operation. App. Br. 15. However, without any persuasive explanation, we cannot find error in the Examiner's rejection based on these grounds.

The Appellants note that claim 61, which depends from claim 39, recites "wherein the radio frequency device comprises a radio frequency transmitter configured to transmit the drug treatment information to the drug delivery device." The Appellants argue that the alleged data carrier of Gordon does not include a radio frequency transmitter and Chartrand does not cure this deficiency. App. Br. 15-16. The Examiner responds that it would have been obvious to reverse the receiver and transmitter because a mere reversal of parts involves only routine skill in the art and the function of monitoring the use of the device will not change. Ans. 9.

We agree with the Examiner. A simple reversal of parts is generally within the knowledge of a person of ordinary skill in the art, and here, the parts are simplistic, commonplace electronic components. *See In re Gazda*, 219 F.2d 449 (CCPA 1955). The Appellants' argument does not provide an explanation why including a radio frequency transmitter in the alleged data carrier of Gordon is not a simple reversal of parts or beyond the knowledge of the skilled artisan.

The Appellants argue that Gordon does not disclose a "drug for delivery to a patient in a drug delivery device," as recited by claim 40, for the same reasons provided for the anticipation rejection of claim 1 regarding a similar limitation, and Chartrand does not cure the deficiency. App. Br. 16. For claim 1's similar limitation, the Appellants argue that the capsules in Gordon do not necessarily contain powder and that the proposed modification to Gordon would remove the powder from the capsule so as to

make it capable of delivery to a patient in a drug delivery system. App. Br. 8. We are not persuaded as the Appellants' arguments are not commensurate with scope of claim 40 which recites "a drug for delivery to a patient in a drug delivery device." Claim 40 does not require that the drug contain powder or exclude drugs that require removing powder to make it capable of delivery in a drug delivery system.

The Appellants also argue that Gordon and Chartrand fail to render obvious "the data carrier is arranged to be powered inductively from a radio frequency signal transmitted from or associated with the drug delivery device," as recited by claim 40 for the explanations given for claim 39. App. Br. 16. Given that we find those arguments unpersuasive as to error in the rejection of claim 39, we reach the same conclusion with regard to the arguments as they apply to the rejection of claim 40.

The Appellants argue that Gordon and Chartrand fail to disclose "the data carrier is arranged to generate the radio-frequency signal bearing the treatment information," as recited by claim 40, and that there is no obvious reason to reverse the transmission direction so as to transmit treatment information from Gordon's data carrier 64. App. Br. 16. We are not persuaded because, as discussed above, we were not persuaded the Examiner's proposal to reverse the transmission direction involves more than routine skill in the art.

The Appellants do not provide arguments regarding the patentability of claims 41 and 44. Accordingly, we sustain the rejection of claims 39-41, 44, and 61 under 35 U.S.C. § 103(a) as unpatentable over Gordon and Chartrand.

Unpatentability – Claims 1, 13, 16-19, and 51-56

The Examiner finds that Anderson teaches the subject matter of independent claims 13 and 19. Ans. 6-7. In particular, the Examiner finds that a controller subsystem 28 of Anderson teaches the controller of claims 13 and 19. *Id.* at 7. The Examiner also finds that Anderson fails to teach transmitting treatment information via a radio frequency signal. *Id.* The Examiner further finds that Gordon teaches a device with an output for transmitting treatment information via a radio frequency signal and concludes that it would have been obvious to use a radio frequency signal as an alternative to the circuitry of Anderson because they are expedients of each other (i.e., known alternatives). *Id.* at 7.

The Appellants argue that Anderson does not disclose "a delivery controller configured to control the amount of the drug delivered to the patient based on the received treatment information," as recited by independent claim 13. App. Br. 17. The Appellants contend that Anderson discloses only that EPROMS are removably connected to the controller 28 to control various aspects of the individual subsystems. *Id.* (citing Anderson, col. 12, l. 58-col. 13, l. 3). We are not persuaded. The Examiner finds that Anderson teaches a delivery controller (controller subsystem 28). Ans. 6-7. The controller subsystem 28 of Anderson is shown as controlling, at least, nebulizer 48. *See* Anderson, fig. 1 (showing line between controller subsystem 28 and nebulizer 48). Thus, the preponderance of the evidence supports the Examiner's finding.

The Appellants argue that there is no obvious rationale to replace the direct-hard-wired connection between EPROM and controller 28 in Anderson with a radio frequency connection, as taught by Gordon. App. Br. 17. The Appellants assert that a radio frequency connection is not an

expedient of Anderson's hard-wired connection because such a change would be more complicated and less reliable. *Id.* The Appellants' argument is not persuasive because a given course of action often has simultaneous advantages and disadvantages, and this does not necessarily obviate any or all reasons to combine teachings. *See Winner Int'l Royalty*, 202 F.3d at 1349 n.8. Therefore, we sustain the Examiner's rejection of independent claim 13.

The Appellants argue that the Office Action fails to indicate how the proposed combination discloses "the electronic input is additionally configured to transmit treatment information to the electronic data carrier for recordal," as recited by claim 16. App. Br. 18. The record before us indicates no findings or reasoning regarding this limitation. Therefore, we cannot sustain the Examiner's rejection of claim 16.

The Appellants argue that the Office Action does not demonstrate how the proposed combination discloses "the electronic input is configured to transmit treatment information via a radio frequency signal to the removable electronic data carrier," as recited by claim 56. App. Br. 19. We agree that the record provides no findings or reasoning regarding this limitation of claim 56. Therefore, we cannot sustain the Examiner's rejection of claim 56.

The Appellants argue that the proposed combination fails to disclose "the drug delivery device includes an authorization portion which prevents delivery if any of the treatment information indicates that the drug is unsuitable for delivery," as recited by claim 17. App. Br. 19 and Reply Br. 4. The Appellants' argument is persuasive. The Examiner cites column 12, lines 11-18, of Anderson as teaching an authorization portion. Ans. 7. The

Examiner further finds that Anderson and Gordon each teach alarms to warn of improper use. Ans. 11 (citing Anderson, col. 13, ll. 13-18 and Gordon, col. 2, ll. 11-18). However, the cited portions of Anderson and Gordon do not disclose "an authorization portion that prevents delivery . . . ," and instead, teach a positive end expiratory pressure (PEEP) mechanism and alarms, none of which are described as preventing delivery. Thus, we cannot sustain the Examiner's rejection of claim 17.

The Appellants argue that Anderson does not disclose a "memory holding drug-specific treatment information concerning the use of the drug delivery device in delivering a specified drug," as recited by independent claim 19. App. Br. 20. We do not agree. The Examiner finds that Anderson's controller subsystem 28 has a memory (EPROM), and the further recitation "holding drug-specific treatment information concerning the use of the drug delivery device in delivering a specified drug" does not provide a structural distinction over the EPROM of Anderson because it is nonfunctional descriptive material. Nonfunctional descriptive material cannot render nonobvious an invention that would have otherwise been obvious. *See In re Ngai*, 367 F.3d 1336, 1339 (Fed. Cir. 2004).[4] Claim 19 does not recite a data structure or other arrangement of the drug-specific treatment information in the memory which might imply that the information modifies the structure of the memory or that the information

[4] Even if the Appellants were to claim the treatment information in a functional form, we note that the memory pointed to by the Examiner stores the instructions for the controller to control the drug delivery device (nebulizer) to deliver the drug. *See, e.g.,* Anderson, col. 13, ll. 28-49, col. 14, ll. 8-12, 64-67, and claim 5.

bears a novel, non-obvious functional relationship to the memory. Therefore, we sustain the Examiner's rejection of claim 19.

The Appellants argue that the rejection of dependent claim 55, which depends from independent claim 20, is improper because the Office Action fails to demonstrate that the proposed combination of Anderson and Gordon renders obvious the subject matter of claim 20. App. Br. 20. The Appellants' argument is persuasive because the record provides no findings or rationale regarding the rejection of claims 20 and 55. Thus, we cannot sustain the rejection of claim 55.

The Appellants argue that the Examiner provides no rationale for the proposed combination of Anderson and Gordon for claim 1. App. Br. 20. The Appellants also argue that the Examiner's proposed combination is not obvious for the same reasons as claims 13 and 19. The Appellants' argument is not persuasive. The scope of claim 1 is substantially similar to the scope of independent claims 13 and 19, for which the Examiner provides findings and rationale based on the proposed modification of Anderson with Gordon. *See* Ans. 6-7. Thus, we do not find that the Examiner's rejection of claim 1 is so lacking that the Appellants could not determine the pertinent factual findings and underlying rationale so that they were denied an opportunity to argue that claim 1 patentably distinguishes over Anderson and Gordon, as indicated by the Appellants' assertion of previous arguments for claims 13 and 19. Furthermore, because we find the arguments for claims 13 and 19 unpersuasive as to error in the rejection of those claims, the same arguments fail to convince us of error in the rejection of claim 1. Therefore, we sustain the Examiner's rejection of claim 1.

The Appellants do not provide arguments regarding the patentability of claims 18 and 51-54. App. Br., *passim* and Reply Br., *passim*. Accordingly, we sustain the rejection of claims 1, 13, 18, 19, and 51-54 but cannot sustain the rejection of claims 16, 17, 55, and 56 under 35 U.S.C. § 103(a) as unpatentable over Anderson and Gordon.

DECISION

We reverse the Examiner's rejection of claims 1, 3, 7, 8, 12, 19-21, 54, 57-60, 62, and 63 under 35 U.S.C. §102(b) as anticipated by Gordon.

We affirm the Examiner's rejection of claims 39-41, 44, and 61 under 35 U.S.C. § 103(a) as unpatentable over Gordon and Chartrand.

We affirm the Examiner's rejection of claims 1, 13, 19, and 51-54 under 35 U.S.C. § 103(a) as unpatentable over Anderson and Gordon.

We reverse the Examiner's rejection of claims 16, 17, 55, and 56 under 35 U.S.C. § 103(a) as unpatentable over Anderson and Gordon.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv) (2011).

AFFIRMED-IN-PART

mp

McCARTHY, *Administrative Patent Judge*, *dissenting*.

I dissent as to my colleagues' decision to sustain the rejections of claims 40, 41, 44 and 61. Our reviewing court has instructed us that the analysis regarding the propriety of a rejection under 35 U.S.C. § 103(a) is highly fact specific and not susceptible to *per se* rules. *In re Ochiai*, 71 F.3d 1565, 1569 (Fed. Cir. 1995). A reversal of parts within a structure might indicate no more than an obvious design choice if the reversal of parts does not change the function. *See In re Gazda*, 219 F.2d 449, 452 (CCPA 1955); *see also In re Gal,* 980 F.2d 717, 719 (Fed. Cir. 1992)(A finding of obvious design choice is precluded when the claimed structure and the function the claimed structure performs are different from the prior art).

Here, however, the Examiner has not provided findings which would justify an inference that the proposed reversal of parts required to meet the language of claim 40 or claim 61 would not have altered the function of the claimed subject matter. The Examiner's statement that the "function of monitoring the use of the device will not change" (Ans. 9), without further explanation, is conclusory. I am not persuaded that the Examiner has articulated reasoning with some rational underpinning adequate to support the conclusion that the subject matter of claims 40, 41, 44 and 61 would have been obvious.